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EXAMINER

NGUYEN, TU X

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/918,443

Applicant(s)

REST ET AL.

Examiner

Tu X. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) 2,14 and 19-36 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 is/are allowed.
- 6) ☒ Claim(s) 1,3-13 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's arguments with respect to claims 1, 12 and 15-17, have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 7, are rejected under 35 U.S.C. 102(e) as being anticipated by Wiedeman (US Patent 6,272,339).

Regarding claim 1, Wideman discloses a cellular telephone network comprising peripheral branches and a central high capacity data trunking region (see col.4 lines 10-25, "global mobile satellite system inherent with peripheral branches and high capacity data trunking region) and using a synchronous data communication protocol (see col.3 49-50, "voice communications" reads on "synchronous data communication") and wherein said high capacity data trunking region comprises a satellite interface for a satellite connection using a non-synchronous data communication protocol (see col.1 lines 20-31, "email" "internet" reads on non-synchronous data communications);

wherein said high capacity trunking region comprises a terrestrial high capacity trunking connection in parallel with said satellite connection such that said satellite connection is usable back up said terrestrial connection (see col.8 lines 55-56).

Regarding claim 7, Wiedeman discloses said satellite link is via geostationary satellite (see col.3 lines 20-21).

4. Claims 12-13 and 15-16, are rejected under 35 U.S.C. 102(e) as being anticipated by Davidson et al. (US Patent 6,735,184).

Regarding claims 12 and 15-16, Davidson et al. disclose a branch of a cellular telephone network based on a first synchronous data communication protocol (see col.1 lines 30-50), comprising interfaces to a satellite link using a second, asynchronous data communication protocol (see col.1 lines 9-14), wherein said interfaces comprise converters (see col.10 lines 14-20) for converting data between said first data communication protocol and said second data communication protocol, wherein said interfaces comprising encoders for encoding synchronization control information of said first protocol (see col.5 lines 61-62) when encoding data of said first protocol into said second protocol, thereby to enable reconstruction of a signal in said first protocol from data in said second protocol, which reconnected data retains said synchronization.

Regarding claim 13, Davidson et al. disclose said interfaces are arranged to provide said satellite link as a parallel path to a terrestrial data link (see abstract).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-6, 8 and 10-11, are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiedeman in view of Davidson et al. (US Patent 6,735,184).

Regarding claims 3, 5 and 11, Wiedeman fails to disclose E1 synchronous and asynchronous data communication protocol.

In the same field of endeavor; Global satellite and PLMN Mobile communications, Davidson et al. disclose E1 synchronous and asynchronous data communication protocol (see col.5 lines 5-39). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Wiedeman with the above teaching of Davidson et al. in order to provide the mobile services switching center redundancy and load sharing and well as direct packet routing between high speed satellite access nodes.

Regarding claim 4, the modified Wiedeman disclose wherein said high capacity trunking region comprises a terrestrial high capacity trunking connection in parallel with said satellite connection such that said terrestrial high capacity trunking connection is usable to back up said satellite connection (see Davidson et al., col.5 lines 5-39).

Regarding claims 6 and 8, the modified Wiedeman discloses said E1-TCP/IP converter comprises a multiplexer for converting between E1 signal and the TCP/IP signal (see Davidson et al., col.5 lines 39-65).

Regarding claim 10, the modified Wiedeman discloses said converter comprises an encoder (see Davidson, 106b fig.2) for encoding synchronization control data describing said

E1 signal in headers of TCP/IP packets, thereby to enable subsequent synchronous reconstruction of said E1 signal.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson et al. (US Patent 6,735,184) in view of Wiedeman.

Regarding claim 17, Davidson et al. fail to disclose a buffer controllable according to said decoded synchronization information to recreate time delay relationships of said telephony protocol data stream.

Wiedeman discloses a buffer controllable according to said decoded synchronization information to recreate time delay relationships of said telephony protocol data stream (see col.7 lines 51-66). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Davidson et al. with the above teaching of Wiedeman in order to provide stored page messages can be later recalled and delivered to the user.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wiedeman in view of Davidson et al. (US Patent 6,735,184) and further in view of Vassilovski et al. (US Pub. 2003/0012159).

Regarding claim 9, the modified Wiedeman fails to disclose an extractor for extracting ss7 signaling, and a TCP/IP packet former for arranging extracted signaling into TCP/IP packets.

Vassilovski et al. disclose an extractor for extracting ss7 signaling, and a TCP/IP packet former for arranging extracted signaling into TCP/IP packets (see par.020). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was

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made to modify the system of the modified Wiedeman with the above teaching of Vassilovski in order to provide ss7 call control message features such as busy signal could not be connected, etc.

***Allowable Subject Matter***

9. Claim 18 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 18, the prior arts fail to teach "interfaces comprising a non-data carrying time slot remover for removing said non-data carrying time slots during conversion into said asynchronous protocol and a time slot regenerator for regenerating non-data carrying time slots during reconstruction", as cited in the claim.

**Conclusion**


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed Tu Nguyen whose telephone number is 571-272-7883. The examiner can normally be reached on Monday through Friday from 6:30AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN

April 4, 2006

  
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